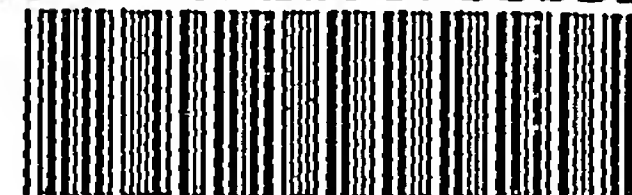


PATENT COOPERATION TREATY

PCT

PCT Application

PCT/CN2003/000005

10/517088
REC'D 08 AUG 2004

WIPO

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <i>PCT02067</i>		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. <i>PCT/CN03/00005</i>	International filing date (day/month/year) <i>03.JAN 2003(03.01.03)</i>	Priority date (day/month/year) <i>06.JUN 2002(06.06.02)</i>	
International Patent Classification (IPC) or national classification and IPC <i>IPC(7): A61K 31/704, A61 /00</i>			
Applicant <i>SHANGHAI JIAHWA UNITED Co., LTD, et al.</i>			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand <i>06. JAN 2004(06.01.04)</i>		Date of completion of this report <i>16.AUG 2004(16.08.04)</i>	
Name and mailing address of the IPEA/ <i>6 Xitucheng Rd., Jimen Bridge, Haidian District, 100088 Beijing, China</i>		Authorized officer <i>ZHANG, W</i>	
Facsimile No. <i>86-10-62019451</i>		Telephone No. <i>86-10-62093855</i>	

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

☒ the international application as originally filed/furnished

☐ the description:

pages _____ as originally filed/furnished

pages * _____ received by this Authority on _____

pages * _____ received by this Authority on _____

☐ the claims:

pages _____ as originally filed/furnished

pages * _____ as amended (together with any statement) under Article 19

pages * _____ received by this Authority on _____

pages * _____ received by this Authority on _____

☐ the drawings:

pages _____ as originally filed/furnished

pages * _____ received by this Authority on _____

pages * _____ received by this Authority on _____

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement:**

Novelty (N)

Claims 1-7

YES

Claims

NO

Inventive step (IS)

Claims

YES

Claims 1-7

NO

Industrial applicability (IA)

Claims 1-7

YES

Claims

NO

2. Citations and explanations (Rule 70.7)**2.1 Claims 1-7 lack an inventive step under PCT Article 33(3) as being obvious over by WANG JW, et al.**

Applicant's arguments have been fully considered, but are not found to be persuasive.

WANG JW et al (D3=CN1294017A) discloses a ceramide liposome emulsion containing VA. Quan DQ et al. (D1=Liaoning Pharmacy and Clinical Remedies) teach freeze-dried liposomes (dry liposome or pro-liposome) can improve the stability of formulation, Quan also discloses some carriers (cryoprotectant). Moreover, D2 (Alain Meybeck, et al., US5034228A) discloses a cosmetic liposomal composition based on hydrated liposomes containing a retinoid or related compound (esp. tretinoin), and teaches that encapsulation of tretinoin in liposomes reduces skin irritant effects. Thus, it would be obvious to an artisan that a pro-liposome may improve physico-chemical stability of the liposome, and to find some suitable excipient/ingredients affecting the stability of dry liposomes, which are already known to be pharmaceutically acceptable. The application as a whole does not provide any evidence that the liposome formed according to the present application indeed distinguishes themselves from the liposome according to the prior art. Thus, claims 1-4 and 2-5 are deemed to be obvious to a person skilled in the art.

2.2 Claims 1-7 are considered to be fulfil the requirement of industrial applicability.**2.3 NEW CITATIONS:**

D3=CN1294017A (WANG JW et al., 2001)